

O I P E
Information Disclosure Statement dated 04-20-2004
Attorney Docket No. 1217-032245
APR 22 2004
PATENT & TRADEMARK OFFICE

PATENT APPLICATION

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/717,281 Confirmation No. 7413
Applicant : Teruhiko NAWATA et al.
Filed : November 19, 2003
Title : "As-Grown Single Crystal Of Alkaline Earth Metal Fluoride"
Group Art Unit : 1765
Examiner : Not yet assigned
Customer No. : 28289

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT
TRANSMITTED BEFORE MAILING OF FIRST OFFICE ACTION

Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby submit this Information Disclosure Statement together with a completed Form PTO/SB/08A and a copy of each reference cited.

The Czochralski method is cited on page 3 of the specification and again on page 4, bridging page 5. The Tozawa et al. report "Modification of Optical Material..." is mentioned on page 4 of the specification. Japanese Publication 21197 is cited on page 5 of the specification.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on April 20, 2004.

Mary Jo Sinicrope

(Name of Person Mailing Document)

Mary Jo Sinicrope
Signature

04/20/2004

Date

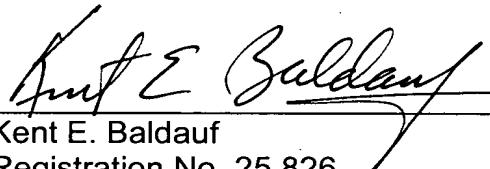
Prior art references cited in the International Search Report in a corresponding European application are also cited herein. The relevance of these references is set forth in the International Search Report. A copy of the International Search Report is enclosed for the Examiner's convenience.

No fee is believed to be due for the filing of this Information Disclosure Statement as it is being submitted before a first Office Action on the merits. Nevertheless, the Commissioner for Patents is hereby authorized to charge any additional fees which may be required to Deposit Account No. 23-0650. The original and two copies of this Information Disclosure Statement are enclosed.

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON
ORKIN & HANSON, P.C.

By



Kent E. Baldauf
Registration No. 25,826
Attorney for Applicants
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818
Telephone: 412-471-8815
Facsimile: 412-471-4094



Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)

Approved for use through 10/31/2001. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | | | | | | | | | | | | | |
|--|------------------------|----|---|--|--|--------------------|------------|-------------|-------------------|----------------------|------------------------|----------------|------|---------------|------------------|------------------------|-------------|
| <p>Substitute for form 1449A/PTO</p> <h1>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h1> <p>(use as many sheets as necessary)</p> | | | | <p>Complete if Known</p> <table border="1"> <tr> <td>Application Number</td> <td>10/717,281</td> </tr> <tr> <td>Filing Date</td> <td>November 19, 2004</td> </tr> <tr> <td>First Named Inventor</td> <td>Teruhiko NAWATA et al.</td> </tr> <tr> <td>Group Art Unit</td> <td>1765</td> </tr> <tr> <td>Examiner Name</td> <td>Not Yet Assigned</td> </tr> <tr> <td>Attorney Docket Number</td> <td>1217/032245</td> </tr> </table> | | Application Number | 10/717,281 | Filing Date | November 19, 2004 | First Named Inventor | Teruhiko NAWATA et al. | Group Art Unit | 1765 | Examiner Name | Not Yet Assigned | Attorney Docket Number | 1217/032245 |
| Application Number | 10/717,281 | | | | | | | | | | | | | | | | |
| Filing Date | November 19, 2004 | | | | | | | | | | | | | | | | |
| First Named Inventor | Teruhiko NAWATA et al. | | | | | | | | | | | | | | | | |
| Group Art Unit | 1765 | | | | | | | | | | | | | | | | |
| Examiner Name | Not Yet Assigned | | | | | | | | | | | | | | | | |
| Attorney Docket Number | 1217/032245 | | | | | | | | | | | | | | | | |
| Sheet | 1 | of | 2 | | | | | | | | | | | | | | |

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

| Examiner Initials | Cite No. ¹ | Foreign Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
|-------------------|-----------------------|-------------------------|---------------------|---|---------------------------------------|---|---------------------------|
| | | Office ³ | Number ⁴ | | | | |
| | | JP (1988) | 63-270385 | A | Hitachi Metals Ltd | 08.11.1988 | English Abstract attached |
| | | JP (1999) | 11-021197 | A | Canon Inc | 26.01.1999 | English Abstract attached |
| | | JP (2001) | 2002-234795 | A | Nec Tokin Corp | 23.08.2002 | English Abstract attached |
| | | EPO | 0 939 147 | A2 | Nikon Corp | 01.09.1999 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O.Box 1450, Alexandria, VA 22313-1450.

{W0117203.1}

Please type a plus sign (+) inside this box →

Approved for use through 10/31/2001. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | |
|--|--|------|--|------------------------|------------------------|
| Substitute for form 1449A/PTO | | | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>(use as many sheets as necessary)</small> | | | | Application Number | 10/717,281 |
| | | | | Filing Date | November 19, 2004 |
| | | | | First Named Inventor | Teruhiko NAWATA et al. |
| | | | | Group Art Unit | 1765 |
| | | | | Examiner Name | Not Yet Assigned |
| Sheet 2 | | of 2 | | Attorney Docket Number | 1217/032245 |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | |
|---|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | K. NASSAU, "Application of the Czochralski Method to Divalent Metal Fluorides", Journal of Applied Physics, Vol. 32, No. 10, (1961), pp. 1820-1821, Bell Telephone Laboratories, Inc., Murray Hill, New Jersey, U.S.A. | |
| | | SHINICHIRO TOZAWA, ET AL., "Modification of Optical Material CaF ₂ ", report of technical research by Institute for Material Research of Tohoku University, No. 19 (2001) Japan, (partial English translation attached) | |
| | | J. M. KO, ET AL., "Czochralski growth of UV-grade CaF ₂ single crystals using ZnF ₂ additive as scavenger", Journal of Crystal Growth 222 (2001), pp. 243-248, N.H Elsevier, Japan | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

APR 22 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | | |
|----------------|---|--|-----------------------|
| Appl. No. | : | 10/717,281 | Confirmation No. 7413 |
| Applicant | : | Teruhiko NAWATA et al. | |
| Filed | : | November 19, 2003 | |
| Title | : | "As-Grown Single Crystal Of Alkaline Earth Metal Fluoride" | |
| Group Art Unit | : | 1765 | |
| Examiner | : | Not yet assigned | |
| Customer No. | : | 28289 | |

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

CERTIFICATION UNDER 37 C.F.R. §1.97(e)(1)

Sir:

I, the undersigned, hereby certify that each item of information cited in the accompanying Information Disclosure Statement was first cited in a communication mailed 12 March 2004 from the European Patent Office in a counterpart European application not more than three months prior to the filing of the accompanying Information Disclosure Statement.

Respectfully submitted,
WEBB ZIESENHEIM LOGSDON
ORKIN & HANSON, P.C.

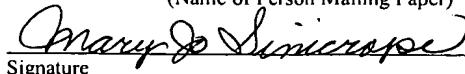
By


Kent E. Baldauf

Registration No. 25,826
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818
Attorney for Applicants
Telephone: (412) 471-8815
Facsimile: (412) 471-4094

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 20, 2004.

Mary Jo Sinicroppe
(Name of Person Mailing Paper)


Signature

04/20/2004
Date